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a test manager adapted to control a state of the hearing aid, to receive an input from said probe and to determine any defect in the hearing aid, and
activation means for selective activation of said test manager to initiate a test procedure.

20. The hearing aid according to claim 19, wherein said test manager is adapted to disconnect said input transducer from the signal path and to activate said probe for determination of the signal parameter in order that the noise level generated by input circuitry of the hearing aid may be determined.

21. The hearing aid according to claim 19, comprising a test signal generator controlled by said test manager and adapted for interjecting a test signal at a second point in the signal path.

22. The hearing aid according to claim 19, wherein said test manager is adapted to compare the input from said probe with desired parameters in order to establish whether the hearing aid has a defect.

23. The hearing aid according to claim 21, wherein said second point is selected to achieve that the test signal effects the emission by said output transducer of a sound signal.

24. The hearing aid according to claim 21, comprising a filter bank with bandpass filters for deriving from the first electrical signal a set of bandpass filtered derivatives of the first electrical signal, wherein said processor is adapted to generate the second electrical signal by individual processing of each of the bandpass filtered derivatives of the first electrical signal and adding together the processed electrical signals to provide the second electrical signal, and wherein said test manager is adapted to selectively connect said probe to the output of one of said bandpass filters.

a/ 25. The hearing aid according to claim 24, wherein said test manager is adapted to connect said probe to the output of a bandpass filter tuned to pick the third harmonic of the output of said test signal generator for determination of harmonic distortion.

26. The hearing aid according to claim 23, wherein said at least one input transducer is a telecoil input transducer, and wherein said output transducer is adapted to generate a magnetic field, that is picked up by said telecoil.

27. The hearing aid according to claim 21, wherein said test manager is adapted to verify the gain of said signal processor.

28. The hearing aid according to claim 27, wherein said test manager is adapted to verify the gain of said signal processor as a function of frequency.

29. The hearing aid according to claim 21, wherein said test manager is adapted to verify the compression of said signal processor.

30. The hearing aid according to claim 19, comprising an adaptive feedback canceller for suppression of acoustic feedback, and wherein said test manager is adapted to verify the operation of said adaptive feedback canceller.

31. The hearing aid according to claim 19, wherein said activation means comprises a switch positioned at a housing of the hearing aid.

32. The hearing aid according to claim 19, wherein said activation means comprises an interface adapted to receive commands from a remote control device adapted to operate the hearing aid.

33. The hearing aid according to claim 19, wherein said activation means comprises an interface adapted to receive commands from a programming device adapted to program the hearing aid.

34. The hearing aid according to claim 19, wherein said activation means comprises an interface adapted to receive commands from a fitting device for the hearing aid.

35. The hearing aid according to claim 19, comprising a memory for storage of a reference value of a parameter.

36. The hearing aid according to claim 19, comprising a tone signal generator for causing generation by said output transducer of a tone signal to alert the user that the hearing aid has a defect.


37. The hearing aid according to claim 36, wherein said test manager is adapted to determining a specific type of defect, and wherein said tone signal generator causes generation by said output transducer of a specific tone signal to alert the user that the hearing aid has a specific defect.


38. The hearing aid according to claim 19, comprising at least two switches in said signal path for the selective determination of signal parameters at respective points of said signal path.

39. The hearing aid according to claim 21, comprising at least two switches in said signal path for the selective interjecting of test signals at respective points of said signal path.

SB 40. A hearing aid comprising
an input transducer for transforming an acoustic input signal into a first electrical signal,
a signal processor for processing the first electrical signal to produce a second electrical
signal based on the first electrical signal,
an output transducer for converting the second signal into sound,
a probe for determining a signal parameter at a first point in a signal path of the hearing
aid extending through said input transducer, said signal processor and said output transducer,
a test signal generator adapted for interjecting a test signal at a selected point in the signal
path of the hearing aid,
a test manager adapted to control a state of the hearing aid, to receive an input from said
probe and to determine any defect in the hearing aid, and
activation means for selective activation of said test manager to initiate a test procedure.

a 41. A hearing aid comprising
an input transducer for transforming an acoustic input signal into a first electrical signal,
a filter bank with bandpass filters for deriving from the first electrical signal a set of
bandpass filtered derivatives of the first electrical signal,
a signal processor for individual processing of each of the bandpass filtered derivatives of
the first electrical signal and adding together the processed electrical signals to provide a second
electrical signal based on the first electrical signal,
an output transducer for converting the second signal into sound,

 a probe adapted for being selectively connected to the outputs of each one of said bandpass filters for determining a respective signal parameter,

 a test signal generator adapted for interjecting a test signal at a selected point in the signal path of the hearing aid extending through said input transducer, said signal processor and said output transducer,

a test manager adapted to control a state of the hearing aid, to receive an input from said probe and to determine any defect in the hearing aid, and

activation means for selective activation of said test manager to initiate a test procedure.
